

ABSTRACT

The aim of the invention is to increase the service life of bearings (WL) in an electric machine (DM). To achieve this the bearing currents (WL) that act on the bearings of the rotor (RO) are reduced by the application of a corresponding negative field voltage to the rotor (RO), obtained with the aid of a compensation unit (KS1). The reduction of the bearing currents prevents ripple formation in the bearing and increased ageing of the lubricant.